

## ABSTRACT OF THE DISCLOSURE

A first alternating signal of which phase changes according to changes in the rotation angle of a first shaft is output, and a second alternating signal of which phase changes according to changes in the rotation angle of a second shaft capable of rotating elastically with respect to the first shaft is output. A phase difference correspondence signal of which waveform changes according to changes in the phase difference between the first alternating signal and second alternating signal is output. A value corresponding to the torque transmitted by the first and second shafts is found from the phase difference  
10 correspondence signal.